

Application No. 09/676,363
Docket No. 1578US3

Art Unit 3762
Examiner: L. Deak

REMARKS

Claims 11-57 are pending in the application, of which claims 11-26 stand rejected, with claims 27-57 being newly added above. Claim 11 has been amended above to claim additional aspects of Applicant's invention.

The September 15, 2004 office action and the references cited therein have been carefully considered. In view of the claims amendments and for the reasons discussed below, Applicant believes that claims 11-26 are allowable over the cited references.

Claim Rejections - 35 U.S.C. § 102

In the September 15, 2004 office action, the Examiner rejected claims 11-17 and 21-24 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 4,406,656 ("Hattler et al."). The Office Action states that "Hattler discloses an indwelling multi-lumen catheter with an elongated cylindrical tube with lumens therethrough." The Office Action, however, fails to mention which elements of Hattler the Examiner regards to be the "transverse septum" and "supporting septum" recited in claim 11. Nonetheless, Applicant has elected to voluntarily amend claim 11 to recite the feature of "the supporting septum supportingly engaging the transverse septum to support the transverse septum and deter deflection of the transverse septum." Support for this amendment may be found at least in Fig. 3 and the associated text, where 18b is an exemplary supporting septum, and 18a is an exemplary transverse septum. Applicant respectfully submits at least this feature is absent from Hattler. For example, if the Examiner is of the opinion that one of the three sides 220 is a transverse septum, Applicant then respectfully submits that none of the remaining two sides 220 could be Applicant's claimed supporting septum "supportingly engaging the transverse septum to support the transverse septum and deter deflection of the transverse septum", because neither of the two remaining sides 220 supportingly engage the "first" side 220 to deter deflection of that side 220.

The absence of at least this feature in the disclosure of Hattler is entirely consistent with the disparate goals between Applicant's invention and the device of Hattler. Applicant's invention is directed to catheters capable of operating at sufficiently high fluid flow rates, without causing collapse of the catheter lumens. In contrast, Hattler is concerned with achieving just the opposite. That is, Hattler is specifically directed to devices comprising

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collapsible lumens. (Abstract.) Providing collapsible lumens is a principal object of Hattler. (Title. Abstract. Column 3, lines 3 -7.) By way of further example, Figures 1-9 depict catheter tubes containing a central lumen and collapsible lumens mounted around the periphery of the central lumen. (Figs. 1-9; Col. 4, lines 58-61; Col. 5, lines 25-32, Col. 6, lines 3-8). Each collapsible lumen is designed to “collapse about itself” when fluid is not flowing through the collapsible lumen. (Col. 4, lines 61-66).

Hence, for all the above reasons, Applicant respectfully requests that the Examiner withdraw the rejection of independent claim of 11, as well as claims 12-17 and 21-24, which depend respectively therefrom.

Claim Rejections - 35 U.S.C. § 103(a)

Claims 18-20 and 25-26 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Hattler et al. in view of U.S. Patent No. 5,395,316 (“Martin”).

Claims 18-20, 25 and 26 are dependent on Claim 11 and incorporate all the elements recited in Claim 11, including a supporting septum “supportingly engaging the transverse septum to support the transverse septum and deter deflection of the transverse septum.” As discussed above, Hattler et al. does not disclose or suggest such a supporting septum. Moreover, Martin also fails to disclose or suggest a “supporting septum supportingly engaging the transverse septum to support the transverse septum and deter deflection of the transverse septum.” Therefore, the deficiency in Hattler et al. is not overcome by combining Hattler et al. with Martin, and the proposed combination fails to disclose each and every element recited in Claims 18-20, 25 and 26. Hence, claims 18-20, 25 and 26 are patentable for at least the reasons cited above. Accordingly, Applicant respectfully requests that the Examiner withdraw the rejection of claims 18-20, 25 and 26.

New Claims

Applicant has added new Claims 27-57. Claims 27-41 recite a multi-lumen catheter comprising an elongated cylindrical tube having a distal and a proximal end and a lumen therethrough, said distal end of the tube having a first beveled surface and a second beveled surface angled away from the first beveled surface, and a transverse septum extending from the

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distal end to the proximal end of the tube within the lumen of the tube and dividing the tube into a withdrawal passageway and a return passageway, the withdrawal passageway open at the first beveled surface at the distal end of the tube, and the return passageway open at the second beveled surface at the distal end of the tube. Support for claims 27-41 is contained in sections of the Specification, including but not limited to Fig. 5 and page 9, lines 13-23. Therefore, no new matter has been introduced in new claims 27-41.

Claims 42-57 recite a multi-lumen catheter having a transverse septum dividing the tube into a return passageway for carrying fluid at first pressure, and a withdrawal passageway for carrying fluid at a second pressure, the first and second pressures creating a pressure differential across the transverse septum, and a supporting septum engaging the transverse septum and restraining the transverse septum against deflection in response to the pressure differential to substantially prevent collapsing of the transverse septum into the withdrawal passageway. Support for claims 42-57 are contained in sections of the Specification, including but not limited to Fig. 3, page 5, lines 1-12, and page 7, lines 7-10. Therefore, no new matter has been introduced in new claims 42-57.

Conclusion

In light of the foregoing remarks, Applicant believes that claims 11-26 are allowable over the cited references. In addition, Applicant respectfully requests that the Examiner consider new claims 27-57, which are believed to be allowable. The Examiner is encouraged to telephone the Applicant's undersigned attorney if the Examiner believes that issues remain regarding the allowability of this application.

Respectfully submitted,



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